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TRANSMITTAL LETTER (General - Patent Pending)	Docket No. OKI.286

In Re Application Of: **Naokatsu Ikegami**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
09/996,788	November 30, 2001	K. Chen		1765	4551

Title:

METHOD FOR MANUFACTURING A SEMICONDUCTOR DEVICE

COMMISSIONER FOR PATENTS:

Transmitted herewith is:

Reply Brief

in the above identified application.

- ☒ No additional fee is required.
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Dated: **July 8, 2004**

ANDREW J. TELESZ, JR.
REG. NO. 33,581

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	:	Before the Board of Appeals
Naokatsu Ikegami	:	Appeal No.:
Serial No.: 09/996,788	:	Group No.: 1765
Filed: November 30, 2001	:	Examiner: K. Chen

For: METHOD FOR MANUFACTURING A SEMICONDUCTOR DEVICE

Date: July 8, 2004

REPLY BRIEF

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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REPLY BRIEF

U.S. Patents and Trademark Office
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Arlington, VA 22202

Date: July 8, 2004

Sir:

In response to the Examiner's Answer dated June 16, 2004, the following remarks are respectfully submitted.

Grouping Of Claims

The Examiner has asserted in the **Grouping of Claims** section (7) on page 2 of the Examiner's Answer dated June 16, 2004, that the grouping of claims in the Appeal Brief dated February 17, 2004, is incorrect, and that claims 10-15 will stand or fall together. The Examiner has asserted that "merely pointing out differences in what the claims cover (reiteration of claim recitation) is not an argument as to why the claims are separately patentable". Appellant respectfully disagrees for the following reasons.

Manual of Patent Examining Procedure section 1206 sets forth the following with respect to the grouping of claims in an Appeal Brief:

> "It should be noted that 37 C.F.R. 1.192(c)(7) requires the appellant to perform two affirmative acts in his or her brief in order to have the separate patentability of a plurality of claims subject to the same rejection considered. The appellant must (A) state that the claims do not stand or fall together and (B) present arguments why the claims subject to the same rejection are separately patentable."

In the **GROUPING OF CLAIMS** section VII beginning on page 5 of the Appeal Brief dated February 17, 2004, Appellant asserted that independent claim 10 is separately patentable on its own merits. Appellant also asserted that dependent claim 12 is patentable on its own merits, and that dependent claim 14 is patentable on its own merits. Thus, Appellant has clearly stated in the Appeal Brief that (A) the claims do not stand or fall together, in compliance with 37 C.F.R. 1.192(c)(7).

In the **ARGUMENTS** section VIII beginning on page 14, line 10 of the Appeal Brief, Appellant asserted the following with respect to claim 12:

> "Applicant respectfully submits that the prior art as relied upon by the Office does not disclose a specific embodiment including the processing parameters as featured in claim 12, and particularly does not disclose the use of such processing parameters to create an etch stop phenomenon that stops a downward extension of an etched misalignment groove. Particularly, the prior art references do not intentionally create an etch stop phenomenon, and thus clearly fail to disclose the featured processing parameters as used specifically together."

Also in the **ARGUMENTS** section VIII beginning on page 15, line 2 of the Appeal Brief, Appellant asserted the following with respect to claim 14:

> "Applicant respectfully submits that the prior art as relied upon by the Office does not disclose a specific embodiment including the processing parameters as featured in claim 14, and particularly does not disclose the use of such processing parameters to create an etch stop phenomenon that stops a downward extension of an etched misalignment groove. Particularly, the prior art references do not intentionally create an etch stop phenomenon, and thus clearly fail to disclose the featured processing parameters as used specifically together."

Thus, contrary to the Examiner's assertion, Appellant has clearly presented in the Appeal Brief arguments (B) explaining why the claims subject to the same rejection are separately patentable.

Accordingly, since Appellant has (A) stated that the claims do not stand or fall together and (B) presented arguments why the claims subject to the same rejection are separately patentable as in compliance with 37 C.F.R. 1.192(c)(7), Appellant has performed the two necessary affirmative acts to have separate patentability of the claims considered. The Honorable Board of Patent Appeals and Interferences is thus respectfully requested to consider separate patentability of the claims listed in the **GROUPING OF CLAIMS** section of the Appeal Brief.

Response to Argument

Appellant has reviewed the **Response to Argument** section (11) beginning on page 6 of the Examiner's Answer, and respectfully submits that the substance of the issues raised therein by the Examiner are addressed in the Appeal Brief.

However, responsive to the comments on page 7, lines 9-12 of the Examiner's Answer, that non-obviousness cannot be shown by attacking references individually where the rejections are based on combinations of references, the following comments are respectfully submitted.

In the **ARGUMENTS** section VIII, beginning on page 7, line 19 of the Appeal Brief, Appellant asserted the following with respect to the Tahara et al. reference (U.S. Patent No. 5,356,515):

> "The occurrence of misalignment grooves is not described or even remotely considered in the Tahara et al. reference.... Since misalignment

grooves are not disclosed or even remotely considered, the Tahara et al. reference clearly fails to disclose or even remotely suggest the need or use of a polymeric product as an etch stop in order to stop etching of a misalignment groove, as featured in claim 10."

Also, as beginning on page 8, line 18 of the Appeal Brief, Appellant asserted the following with respect to the conventional approaches discussed in the Yamada reference (U.S. Patent No. 5,827,778):

"**Accordingly, the conventional prior art processing methods as described in the Yamada reference are not disclosed or remotely suggested as using a polymeric product formed during etching of a misalignment groove as an etch stop, as featured in claim 10.**"

As beginning on page 9, line 11 of the Appeal Brief, Appellant asserted the following with respect to the preferred embodiments of the Yamada reference:

"**Since a misalignment groove is prevented from occurring in the preferred embodiments, the Yamada reference does not disclose or even remotely suggest using a polymeric product formed during etching of a misalignment groove as an etch stop, as featured in claim 10.**"

As beginning on page 10, line 19 of the Appeal Brief, Appellant asserted the following with respect to the Pu et al. reference (U.S. Patent No. 5,843,847):

"Accordingly, the Pu et al. reference is directed to controlling volumetric flow ratios of etching gas **so that excessive passivating deposits are not**

formed to stop etching. Since the Pu et al. reference is directed to controlling processing so that etching can proceed without excessive formation of passivating products, the Pu et al. reference would provide no motivation to create the necessary polymeric products to intentionally stop etching."

Accordingly, contrary to the Examiner's assertion in the Examiner's Answer, Appellant has not merely attacked the references individually. On the contrary, Appellant has addressed the references respectively in turn, to highlight why the references taken as a whole, fail to disclose or make obvious the features of claim 10. Appellant asserted the following beginning on page 11, line 10 of the Appeal Brief:

"Particularly, the relied upon prior art taken as a whole does not disclose or remotely suggest intentionally using polymeric products formed during etching of a misalignment groove as an etch stop..."

Accordingly, Appellant respectfully submits that the arguments as presented in the Appeal Brief are proper, in that the prior art references are addressed collectively as a whole.

Conclusion

Appellant respectfully requests favorable consideration and allowance of all claims by the Honorable Board of Patent Appeals and Interferences.

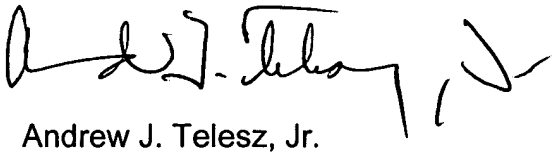
In the event that there are any outstanding matters remaining in the present application, please contact Andrew J. Telesz, Jr. (Reg. No. 33,581) at (703) 715-0870

in the Washington, D.C. area, to discuss these matters.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment for any additional fees that may be required, or credit any overpayment, to Deposit Account No. 50-0238.

Respectfully submitted,

VOLENTINE FRANCOS, P.L.L.C.



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